

**Notice of Allowability**

Application No.

10/083,095

Applicant(s)

CARBERRY ET AL.

Examiner

Art Unit

Alessandro V. Amari

2872

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/1/2004.
2. ☒ The allowed claim(s) is/are 2-5 and 7-14.
3. ☒ The drawings filed on 2/26/2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Thomas Kulaga on 03 August 2004.

The application has been amended as follows:

(a) Cancel claims 1 and 6.

(b) Amend claim 2 as follows –

2. (Currently amended): An apparatus for switching a plurality of optical paths, each carrying an optical signal, said apparatus comprising:  
a first splitter having an input being a primary optical signal;  
a second splitter having an input being a secondary optical signal;  
an analog selection circuit having a first input from said first splitter and a second input from said second splitter; [the apparatus of claim 1] wherein said analog selection circuit includes a timing circuit responsive to said primary optical signal; and a deselect circuit responsive to said timing circuit[.], and  
an optical switch having a first switch input from said first splitter and a second switch input from said second splitter, said switch responsive to said analog selection circuit.

(c) Amend claim 7 as follows –

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7. (Currently amended): An apparatus for switching a plurality of optical paths, each carrying an optical signal, said apparatus comprising:

a first splitter having an input being a primary optical signal;

a second splitter having an input being a secondary optical signal;

an analog selection circuit having a first input from said first splitter and a second input from said second splitter; [The apparatus of claim 1] wherein said analog selection circuit includes a means for routing said secondary optical signal after said primary optical signal becomes invalid; a means for determining whether said primary optical signal has been valid for a selected period; and a means for deselecting said secondary optical signal and routing said primary optical signal through said optical switch[.], and

an optical switch having a first switch input from said first splitter and a second switch input from said second splitter, said switch responsive to said analog selection circuit.

***Allowable Subject Matter***

2. Claims 2-5 and 7-14 are allowed.
3. The following is an examiner's statement of reasons for allowance:

Claim 2 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "a timing circuit responsive to said primary optical signal; and a deselect circuit responsive to said timing circuit" as set forth in the claimed combination. Claims 3-5 are also allowable due to their dependence on claim 2.

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Claim 7 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, “wherein said analog selection circuit includes a means for routing said secondary optical signal after said primary optical signal becomes invalid; a means for determining whether said primary optical signal has been valid for a selected period; and a means for deselecting said secondary optical signal and routing said primary optical signal through said optical switch” as set forth in the claimed combination.

Claim 8 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, “a timing circuit responsive to said first splitter second output, said timing circuit including a resistor and a capacitor having a charging time defining a selected period” as set forth in the claimed combination.

Claim 9 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, “a timing circuit responsive to said primary optical signal, and a deselect circuit responsive to said timing signal” as set forth in the claimed combination. Claims 10-13 are also allowable due to their dependence on claim 9.

Claim 14 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, “a means for determining when said primary optical signal has been valid for a selected period; and a means for deselecting said secondary optical signal” as set forth in the claimed combination.

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The prior art of record, Wayman et al and Laughlin teach an apparatus for switching a plurality of optical paths, comprising a first splitter having an input being a primary optical signal; a second splitter having an input being a secondary optical signal; an analog selection circuit having a first input from said first splitter and a second input from said second splitter; and an optical switch having a first switch input from said first splitter and a second switch input from said second splitter, said switch responsive to said analog selection circuit. However, the prior art does not teach that the analog circuit includes a timing circuit responsive to said primary optical signal; and a deselect circuit responsive to said timing circuit and there is no motivation or teaching to modify this difference as derived.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro V. Amari whose telephone number is (571) 272-2306. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ava (1/24)  
04 August 2004

  
MARK A. ROBINSON  
PRIMARY EXAMINER